

FORM PTO 1390  
(REV 10-2003)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

J1036.0006/P006

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

10/500556

INTERNATIONAL APPLICATION NO.  
PCT/EP02/00619INTERNATIONAL FILING DATE  
18 January 2002

PRIORITY DATE CLAIMED

TITLE OF INVENTION BIOREACTOR

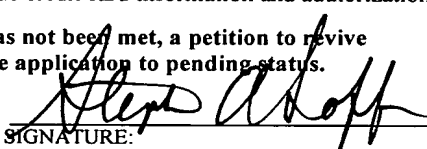
APPLICANT(S) FOR DO/EO/US Gianni Carturan et al.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☐ An Application Data Sheet under 37 CFR 1.76.
15. ☒ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: Intl. Prel. Exam. Report; Intl. Search Report;

| U.S. APPLICATION NO. <b>10/500556</b>  |                           | INTERNATIONAL APPLICATION NO.<br>PCT/EP02/00619 |   | ATTORNEY'S DOCKET NUMBER<br>J1036.0006/P006  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
|--|---------------------------|---|---|--|------|--------------|---------|----|---------|--------------------|-------|--|---|---|--|--|---|--------------------------------------|--|--|-------------|--|--|--|----|-------------------|--|--|-----------|--|--|--|----|-----------------------------|--|--|-----------|---|--|--|------------|------------------------------|--|--|-----------|--|--|--|---------------------------|--|-------------|
| 21. <input checked="" type="checkbox"/> The following fees are submitted:<br><b>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) – (5)):</b><br><input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... \$1080.00<br><input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... \$920.00<br><input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$770.00<br><input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... \$730.00<br><input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... \$100.00<br><br><b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b><br>Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).   |                           |   |   | <b>CALCULATIONS PTO USE ONLY</b><br><br><br><br><br><br><br><br><br><br><table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: right;">\$ 920.00</td> <td style="width:50%;"></td> </tr> <tr> <td style="text-align: right;">\$</td> <td></td> </tr> </table> |      | \$ 920.00    |         | \$ |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
|  |                           |   |   | \$ 920.00  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| \$   |                           |   |   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;">CLAIMS</th> <th style="width:25%;">NUMBER FILED</th> <th style="width:25%;">NUMBER EXTRA</th> <th style="width:25%;">RATE</th> </tr> </thead> <tbody> <tr> <td>Total claims</td> <td style="text-align: center;">26-20 =</td> <td style="text-align: center;">6</td> <td style="text-align: center;">x 18.00</td> </tr> <tr> <td>Independent claims</td> <td style="text-align: center;">3-3 =</td> <td></td> <td style="text-align: center;">x</td> </tr> <tr> <td colspan="3">MULTIPLE DEPENDENT CLAIM(s) (if applicable)</td> <td style="text-align: center;">+</td> </tr> <tr> <td colspan="3"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td style="text-align: right;">\$ 1,028.00</td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.         </td> <td style="text-align: right;">\$</td> </tr> <tr> <td colspan="3"><b>SUBTOTAL =</b></td> <td style="text-align: right;">\$ 514.00</td> </tr> <tr> <td colspan="3">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).</td> <td style="text-align: right;">\$</td> </tr> <tr> <td colspan="3"><b>TOTAL NATIONAL FEE =</b></td> <td style="text-align: right;">\$ 514.00</td> </tr> <tr> <td colspan="3">Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property</td> <td style="text-align: right;">+ \$ 40.00</td> </tr> <tr> <td colspan="3"><b>TOTAL FEES ENCLOSED =</b></td> <td style="text-align: right;">\$ 554.00</td> </tr> </tbody> </table> |                           | CLAIMS  | NUMBER FILED  | NUMBER EXTRA   | RATE | Total claims | 26-20 = | 6  | x 18.00 | Independent claims | 3-3 = |  | x | MULTIPLE DEPENDENT CLAIM(s) (if applicable) |  |  | + | <b>TOTAL OF ABOVE CALCULATIONS =</b> |  |  | \$ 1,028.00 | <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2. |  |  | \$ | <b>SUBTOTAL =</b> |  |  | \$ 514.00 | Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)). |  |  | \$ | <b>TOTAL NATIONAL FEE =</b> |  |  | \$ 514.00 | Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property |  |  | + \$ 40.00 | <b>TOTAL FEES ENCLOSED =</b> |  |  | \$ 554.00 | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"></td> <td style="width:50%; text-align: right;">Amount to be refunded: \$</td> </tr> <tr> <td></td> <td style="text-align: right;">charged: \$</td> </tr> </table> |  |  | Amount to be refunded: \$ |  | charged: \$ |
| CLAIMS   | NUMBER FILED              | NUMBER EXTRA                                    | RATE  |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| Total claims   | 26-20 =                   | 6   | x 18.00   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| Independent claims   | 3-3 =                     |   | x   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| MULTIPLE DEPENDENT CLAIM(s) (if applicable)  |                           |   | +   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |                           |   | \$ 1,028.00   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.   |                           |   | \$  |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| <b>SUBTOTAL =</b>  |                           |   | \$ 514.00   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).   |                           |   | \$  |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| <b>TOTAL NATIONAL FEE =</b>  |                           |   | \$ 514.00   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
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| <b>TOTAL FEES ENCLOSED =</b>   |                           |   | \$ 554.00   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
|  | Amount to be refunded: \$ |   |   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
|  | charged: \$               |   |   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.<br>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.<br>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>04-1073</u> . A duplicate copy of this sheet is enclosed.<br>d. <input checked="" type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.   |                           |   |   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| <b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.   |                           |   |   |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |
| SEND ALL CORRESPONDENCE TO:<br>Stephen A. Soffen<br>DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP<br>2101 L Street NW<br>Washington, DC 20037-1526<br>(202) 828-4879<br>CUSTOMER NUMBER: 24998  |                           |   | <br>SIGNATURE: _____<br>NAME: Stephen A. Soffen<br>_____<br>31,063<br>REGISTRATION NUMBER |  |      |              |         |    |         |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |    |                   |  |  |           |  |  |  |    |                             |  |  |           |   |  |  |            |                              |  |  |           |  |  |  |                           |  |             |